

What is claimed is:

1. A structural foam article comprising:

(a) at least one thermoplastic;

(b) about 2% to about 15% by volume reinforcing particles, each of said reinforcing particles having one or more layers of 0.7nm-1.2 nm thick platelets, wherein more than about 50% of the reinforcing particles are less than about 20 layers thick, and wherein more than about 99% of the reinforcing particles are less than about 30 layers thick; and

(c) at least one blowing agent present in a range from about 0.5% to about 10% by weight.

2. A method of producing structural foam articles comprising:

(a) preparing a melt of at least one thermoplastic having about 2% to about 15% by volume reinforcing particles having one or more layers of 0.7nm-1.2 nm thick platelets, wherein more than about 50% of the reinforcing particles are less than about 20 layers thick, wherein more than about 99% of the reinforcing particles are less than about 30 layers thick, and said melt comprising at least one blowing agent present in a range from about 0.5% to about 10% by weight; and

(b) subjecting the polymer melt to a molding process, wherein the molding process is a process selected from the group consisting of injection molding and extrusion molding.